

IN THE CLAIMS

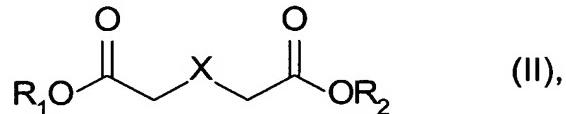
Please amend the claims as follows:

1. (Currently Amended) A process for the preparation of macrocyclic ketones of the formula I



where

X is a mono- or polyunsaturated or saturated C₁₀-C₁₇-alkyl radical which may optionally be substituted by a C₁-C₆-alkyl radical,
said process comprising direct cyclization of a compound of the formula II



where

R₁, R₂, in each case independently of the other, may be identical or different and are hydrogen or C₁-C₆-alkyl and X has the meaning given above, and wherein said cyclization takes place in the gas phase over a heterogeneous catalyst, comprising, as active components, oxides, hydroxides or carboxylates of subgroups I to VIII, or of main groups II, III and IV,
wherein the compound of formula (II) is evaporated and then passed at a desired reaction temperature in gaseous form over the catalyst arranged in a fixed bed.

2. (Previously Presented) The process as claimed in claim 1, wherein the reaction takes place at temperatures of from 200 to 600°C.

Claims 3-4(Cancelled).

5. (Previously Presented) The process as claimed in claim 1, wherein the catalyst is a heterogeneous catalyst, comprising, as active components, oxides, hydroxides or carboxylates of subgroups I to VIII.

6. (Previously Presented) The process as claimed in claim 1, wherein the catalyst is a heterogeneous catalyst, comprising, as active components, oxides, hydroxides or carboxylates of subgroup IV.

7. (Previously Presented) The process as claimed in claim 1, wherein the catalyst is doped with oxides of main group I.

8. (Previously Presented) The process as claimed in claim 1, wherein the catalyst is TiO₂.

9. (Previously Presented) The process as claimed in claim 1, wherein the catalyst is TiO₂ doped with alkali metal oxides or alkaline earth metal oxides.

10. (Previously Presented) The process as claimed in claim 1, wherein the compound of the formula I is selected from the group consisting of exaltone and civetone.

11. (Previously Presented) The process as claimed in claim 1, wherein the compound of the formula II is selected from the group consisting of dimethyl 1,16-hexadecanedioate and dimethyl 1,18-octadec-9-enedicarboxylate.

12. (Previously Presented) The process as claimed in claim 1, wherein the reaction is carried out in the presence of from 0 to 30% by weight of water, based on the compound of the formula II.

13. (Previously Presented) The process as claimed in claim 2, wherein the catalyst is a fixed-bed catalyst.

14. (Previously Presented) The process as claimed in claim 2, wherein the catalyst is a heterogeneous catalyst, comprising, as active components, oxides, hydroxides or carboxylates of subgroups I to VIII, or of main groups II, III, and IV.

15. (Previously Presented) The process as claimed in claim 2, wherein the catalyst is a heterogeneous catalyst, comprising, as active components oxides, hydroxides or carboxylates of subgroups I to VII.

16. (Previously Presented) The process as claimed in claim 2, wherein the catalyst is a heterogeneous catalyst, comprising, as active components, oxides, hydroxides or carboxylates of subgroup IV.

17. (Previously Presented) The process as claimed in claim 2, wherein the catalyst is doped with oxides of main group I.

18. (Previously Presented) The process as claimed in claim 2, wherein the catalyst is TiO₂.

19. (Previously Presented) The process as claimed in claim 2, wherein the catalyst is TiO₂ doped with alkali metal oxides or alkaline earth metal oxides.

20. (Previously Presented) The process as claimed in claim 2, wherein the compound of the formula I is selected from the group consisting of exaltone and civetone.